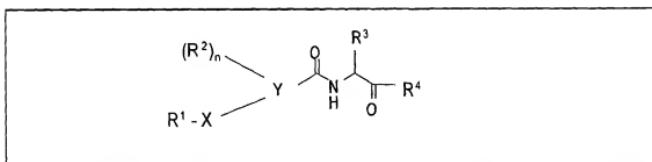


Marked-Up Version of Claims

1. (Amended) An amide of the general formula I



and its tautomeric and isomeric forms, possible enantiomeric and diastereomeric forms, as well as possible physiologically tolerable salts, in which the variables have the following meanings:

R¹ is selected from the group consisting of phenyl, naphthyl, quinolyl, pyridyl, pyrimidyl, pyrazyl, pyridazyl, imidazolyl, thiazole, quinazyl, isoquinolyl, [quinazyl,] quinoxalyl, thienyl, benzothienyl, benzofuranyl, furanyl, and indolyl, where the rings can be additionally substituted by up to 3 radicals R⁵,

R² is selected from the group consisting of chlorine, bromine, fluorine, C₁-C₆-alkyl, C₁-C₆-alkenyl, C₁-C₆-alkynyl, C₁-C₆-alkylphenyl, C₁-C₆-alkenylphenyl, C₁-C₆-alkynylphenyl, phenyl, NHCO-C₁-C₄-alkyl, NHSO₂-C₁-C₄-alkyl, -NHCOphenyl, -NHCO-naphthyl, NO₂, -O-C₁-C₄-alkyl and NH₂, where the aromatic rings can additionally carry one or two radicals R⁵ and two radicals R² together can also be a chain -CH=CH-CH=CH- and thus form a fused benzo ring, which can be substituted by one R⁵ and

R³ is -C₁-C₆-alkyl, which is branched or unbranched, and which can additionally carry an S-CH₃ radical or a phenyl, cyclohexyl, cycloheptyl, cyclopentyl, indolyl, pyridyl or naphthyl ring which is substituted by at most two radicals R⁵, where R⁵ is selected from the group consisting of hydrogen, C₁-C₄-alkyl, which is branched or unbranched,

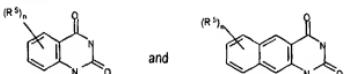
-O-C₁-C₄-alkyl, OH, Cl, F, Br, I, CF₃, NO₂, NH₂, CN, COOH, COO-C₁-C₄-alkyl, -NHCO-C₁-C₄-alkyl, -NHCO- phenyl, -NHSO₂-C₁-C₄-alkyl, -NHSO₂-phenyl, -SO₂-C₁-C₄-alkyl, -(CH₂)_n-NR¹²R¹³ and -SO₂-phenyl,

X is selected from the group consisting of a bond, $-(\text{CH}_2)_m-$, $-(\text{CH}_2)_m-O-(\text{CH}_2)_o-$, $-(\text{CH}_2)_o-S-(\text{CH}_2)_m-$ [sic], $-(\text{CH}_2)_o-SO-(\text{CH}_2)_m-$, $-(\text{CH}_2)_o-SO_2-(\text{CH}_2)_m-$, $-\text{CH}=\text{CH}-$, $-\text{C}[\text{b}]\equiv\text{C}-$, $-\text{CO}-\text{CH}=\text{CH}-$, $-(\text{CH}_2)_o-\text{CO}-(\text{CH}_2)_m-$, $-(\text{CH}_2)_m-\text{NHCO}-(\text{CH}_2)_o-$, $-(\text{CH}_2)_m-\text{CONH}-(\text{CH}_2)_o-$, $-(\text{CH}_2)_m-\text{NHSO}_2-(\text{CH}_2)_o-$, $-\text{NH}-\text{CO}-\text{CH}=\text{CH}-$, $-(\text{CH}_2)_m-\text{SO}_2\text{NH}-(\text{CH}_2)_o-$, $-\text{CH}=\text{CH}-\text{CONH}-$ and



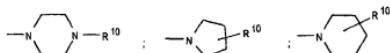
and in the case of $\text{CH}=\text{CH}$ double bonds can be either the E or the Z form and

R^1-X together are also



Y is pyrimidine [pyridine], and

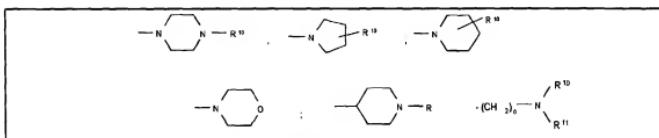
R^4 is selected from the group consisting of hydrogen, $COOR^6$, $CO-Z$, in which Z is NR^7R^8 ,



R⁶ is hydrogen or C₁-C₆-alkyl, which is linear or branched, and which can be substituted by a phenyl ring which itself can additionally be substituted by one or two radicals R⁹, and

R⁷ is hydrogen or C₁-C₆-alkyl, which is branched and unbranched, and

R⁸ is hydrogen or C₁-C₆-alkyl, which is branched or unbranched which can additionally be substituted by a phenyl ring which can additionally carry a radical R⁹, and by



and

R⁹ is selected from the group consisting of hydrogen, C₁-C₄-alkyl, which is branched or unbranched, -O-C₁-C₄-alkyl, OH, Cl, F, Br, I, CF₃, NO₂, NH₂, CN, COOH, COO-C₁-C₄-alkyl, -NHCO-C₁-C₄-alkyl, -NHCO-phenyl, -NHSO₂-C₁-C₄-alkyl, -NHSO₂-phenyl, -SO₂-C₁-C₄-alkyl and -SO₂-phenyl

R¹⁰ is hydrogen or C₁-C₆-alkyl, which is linear or branched, and which can be substituted by a phenyl ring which itself can additionally be substituted by one or two radicals R⁹, and

R¹¹ is hydrogen or C₁-C₆-alkyl, which is linear or branched, and which can be substituted by a phenyl ring which itself can additionally be substituted by one or two radicals R⁹, and

n is a number 0, 1 or 2, and

m and o independently of one another are each a numeral 0, 1, 2, 3 or 4.

2. (Amended) An amide of the formula I as claimed in claim 1, where

R³ is benzyl, CH₂CH₂CH₂CH₃, or CH₂CH₂CH₂CH₂CH₃ and

Y is pyrimidine [pyridine] and

R⁴ is CO-NR⁷NR⁸ and

R⁷ is hydrogen

R⁸ is CH₂CH₂, CH₂CH₂CH₂, or CH₂CH₂CH₂CH₂ and

R⁹ is hydrogen and

n is 0 or 1 and

all remaining variables have the same meanings as in claim 1.

3. An amide of the formula I as claimed in claim 1, where

R³ is benzyl, CH₂CH₂CH₂CH₃, or CH₂CH₂CH₂CH₂CH₃ and

Y is pyrimidine [pyridine] and

R⁴ is hydrogen and

R⁹ is hydrogen

n is 0 or 1 and

all remaining variables have the same meanings as in claim 1.

7. A method of inhibiting cysteine proteases in a patient in need of such treatment comprising administering an effective amount of a compound of claim 1 to a patient in need of such treatment.

8. The method of claim 7 wherein the cysteine proteases are selected from the group consisting of calpains I and II and cathepsins B and L.

10. (Amended) A method of treating neurodegenerative diseases and neuronal damage in a patient in need of such treatment comprising administering an effective amount of a compound of claim 1 to a patient in need of such treatment.

11. The method of claim 10 where the neurodegenerative diseases and neuronal damage is caused by ischemia, trauma or mass hemorrhages.

12. The method of claim 10 for the treatment of cerebral stroke and craniocerebral trauma.
13. The method of claim 10 wherein the disease is Alzheimer's disease or Huntington's disease.
14. The method of claim 10 wherein the disease is epilepsy.
15. A method of treating damage to the heart after cardiac ischemias, reperfusion damage after vascular occlusion, damage to the kidneys after renal ischemias, skeletal muscular damage, muscular dystrophies, damage which results due to proliferation of the smooth muscle cells, coronary vasospasm, cerebral vasospasm, cataracts of the eyes or restenosis of the blood vessels after angioplasty comprising administering an effective amount of a compound of claim 1 to a patient in need of such treatment.
16. A method of treating tumors and metastasis thereof comprising administering an effective amount of a compound of claim 1 to a patient in need of such treatment.
17. A method of treating diseases in which increased interleukin-1 levels occur comprising administering an effective amount of a compound of claim 1 to a patient in need of such treatment.
18. A method of treating inflammation and rheumatic disorders comprising administering an effective amount of a compound of claim 1 to a patient in need of such treatment.
19. A pharmaceutical composition for oral, parenteral and intraperitoneal use, comprising a compound of claim 1 and a pharmaceutically acceptable carrier.